



Microsoft Fabric Analytics Engineer (DP-600)

Description

This course: **Microsoft Fabric Analytics Engineer (DP-600)**, covers methods and practices for implementing and managing enterprise-scale data analytics solutions using Microsoft Fabric.

Participants in the Microsoft Fabric Analytics Engineer (DP-600) training will develop their analytics experience and learn to use Microsoft Fabric components, including lakehouses, data warehouses, notebooks, data streams, data pipelines, and semantic models, to create and deploy analytics assets.

Course Content

Module 1: Data Ingestion with Dataflows Gen2 in Microsoft Fabric

- Understanding Dataflows (Gen2) in Microsoft Fabric
- Exploring Dataflows (Gen2) in Microsoft Fabric
- Integrating Dataflows (Gen2) and Pipelines in Microsoft Fabric

Module 2: Data Ingestion with Spark and Microsoft Fabric Notebooks

- Connecting to Data with Spark
- Writing Data into a Lakehouse
- Considering the Uses of Ingested Data

Module 3: Using Data Factory Pipelines in Microsoft Fabric

- Understanding Pipelines
- Using the Copy Data Activity
- Using Pipeline Templates
- Executing and Monitoring Pipelines

Module 4: Getting Started with Lakehouses in Microsoft Fabric

- Exploring the Microsoft Fabric Lakehouse
- Working with Microsoft Fabric Lakehouses
- Exploring and Transforming Data in a Lakehouse

Module 5: Organizing a Fabric Lakehouse using Medall Architecture Design

- Describing Medal Architecture
- Implementing Medal Architecture in Fabric
- Querying and Reporting on Data in Your Fabric Lakehouse
- Considerations for Managing Your Lakehouse

Module 6: Using Apache Spark in Microsoft Fabric

- Preparing to Use Apache Spark
- Running Spark Code
- Working with Data in a Spark DataFrame
- Working with Data Using Spark SQL
- Visualizing Data in a Spark Notebook

Module 7: Working with Delta Lake Tables in Microsoft Fabric

- Understanding Delta Lake
- Creating Delta Tables
- Working with Delta Tables in Spark
- Using Delta Tables with Streaming Data

Module 8: Getting Started with Data Warehouses in Microsoft Fabric

- Understanding the Fundamentals of Data Warehouses
- Understanding Data Warehouses in Fabric
- Querying and Transforming Data
- Preparing Data for Analysis and Reporting
- Securing and Monitoring Your Data Warehouse

Module 9: Loading Data into a Microsoft Fabric Data Warehouse

- Exploring Data Loading Strategies
- Using Data Pipelines to Load a Warehouse
- Loading Data Using T-SQL
- Loading and Transforming Data with Dataflow Gen2

Module 10: Querying a Data Warehouse in Microsoft Fabric

- Using the SQL Query Editor
- Exploring the Visual Query Editor
- Using Client Tools to Query a Warehouse

Module 11: Monitoring a Microsoft Fabric Data Warehouse

- Monitoring Capacity Metrics
- Monitoring Current Activity
- Monitoring Queries

Module 12: Understanding Scalability in Power BI

- Describing the Importance of Scalable Models
- Implementing Best Data Modeling Practices in Power BI
- Configuring Large Datasets

Module 13: Creating Model Relationships in Power BI

- Understanding Model Relationships
- Configuring Relationships
- Using DAX Relationship Functions
- Understanding Relationship Evaluation

Module 14: Using Tools to Optimize Power BI Performance

- Using the Performance Analyzer
- Diagnosing DAX Performance Issues Using DAX Studio
- Optimizing a Data Model Using Best Practice Analyzer

Module 15: Applying Security to Power BI Models

- Restricting Access to Power BI Model Data
- Restricting Access to Power BI Model Objects
- Applying Good Data Modeling Practices

Documentation

- Digital course material included

Participant profiles

- Solution Architects
- Data Engineers
- Data Scientists
- AI Engineers
- Database Administrators
- Power BI Data Analysts

Prerequisites

- Understanding data concepts through Microsoft Azure AI Fundamentals (AI-900).
- Experience in Power BI for data modeling and advanced analytics (PL-300).

Objectives

- Mastering Data Ingestion with Microsoft Fabric
- Leveraging Data Pipelines and Lakehouses
- Implementing Advanced Data Architectures
- Developing Skills in Apache Spark
- Working with Delta Lake and Data Warehouses
- Optimizing Data Analysis with Power BI

Description

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Niveau

Avancé

Classroom Registration Price (CHF)

3600

Virtual Classroom Registration Price (CHF)

3400

Duration (in Days)

4

Reference

